

Cascade Generators for Accelerating Particles to  
4 MeV, by Walter Heilpern, 17 pp.

GERMAN, per, Helv Phys Acta, Vol XXVIII, 1955,  
pp 485-491.

AEC UCRL Tr 531

Sci - Phys  
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Sodium Chloride Stress in Adrenal-Remotized Dogs  
under Treatment with Cortexone and Cortexone-  
Cortisone, by F. Gross and P. Lichtlen, 4 pp.

GERMAN, per, Helv Phys Acta, Vol XIV, 1956, pp  
27-29.

SLA 57-2978

Sci

Aug 58

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Model-Independent Description of Modulation Effects  
in Nuclear Induction, by K. Halbach, 8 pp.

*EX-1000*  
Swiss, per, Helv Phys Acta, Vol XXIX, 1956,  
pp 37-46.

Sci - Nuclear Physics  
Sep 59  
Vol II, No 2

AT3-791290  
*418-3853-6*  
AECT-3853

*98,671*

Elastic and Inelastic Scattering for Protons on  
Carbon, by H. Schneider,

GERMAN, per, Helv Physica Acta, Vol XXIX, No 1,  
p 55, 1956,

C.S.I.R.O. 105  
University of Melbourne  
Languages Section  
Faculty of Sci

Sci  
May 60

115171

Studies of the Conversion-Electron Correlation  
by F. Gini, E. Beer, et al, 70 pp.

GERMAN, par, Helvetica Physica Acta,  
Vol XXX, No 2, 1956, pp 187-186.

AERE, Harwell  
Tr-1682

Sci - Electron  
Sep 62

AEC-NP-TR-1003

211,527

Induced Ferroelectricity in  $\text{SrTiO}_3$  at Very Low  
Temperatures and Refrigeration through Adiabatic  
Depolarization, by H. Granicher, 2 pp.

GERMAN, per, Helv Phys Acta, Vol XXIX, 1956, pp 211-  
212.

SLA 57-2303

Jul 58

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The Level Scheme of  $^{181}\text{Ta}$ , by P. Debrunner,  
E. Heer, et al.

GERMAN, par, Helvetica Physica Acta,  
Vol XXIX, No 5/6, 1956, pp 463-536.

AENE, Harwell  
Tr-1683

AEC-NP-TR-953 (9208808)

Sci - Chem  
Sep 62

211.528

Absorption Measurement of Cosmic Radiation Using  
Scintillation Counter, by Ch. Burchhardt, 11 pp.

GERMAN, per, Helv Phys Acta, Vol XXIX, 1956,  
pp 533-544.

AEC Tr-4114

Sci - Phys  
Sep 60

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Determination of the Coefficients of Diffusion of  
Silver and of Iodine in the Three Modifications of  
Silver Iodide by the Method of Heterogeneous  
Isotopic Exchanges, by P. Jordan, M. Pochon, 16 pp.

GERMAN, per, Helvetica Physica Acta, Vol XXX, 1957,  
pp 33-48.

AEC Tr 3284

Sci - Phys

Sep 58

*73, 765*

Electrostatic Induced Displacement of Nuclear Magnetic  
Proton Resonance Lines in Dilute Polar Liquids, by  
P. Diehl,

GERMAN, per, Kolv Phys Acta, Vol XIX, 1957, pp 91, 92.

AEC Tr-4002

Sci - Nuc Phys

May 60

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The Half-Life and Decay Scheme of  $U^{235}$ , by E.  
Wurger, K. P. Meyer, P. Huber, 34 pp.

GERMAN, per, Helv Phys Acta, Vol XXX, No ~~2~~ 2, 3,  
1957, pp 157-182.

AEC TT-845

Sci - Phys  
May 60

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Duree de Vie et Schema de Desintegration  $^{235}\text{U}$ ,  
(Lifetime and Decay Scheme of  $\text{U}^{235}$ ), by E.  
Wurger, K. P. Meyer, P. Huber, 39 pp.

GERMAN to FRENCH, per, Helv Phys Acta, Vol XXX,  
1957, pp 157-182.

Reverse Trans  
CEA Tr-A-599

Apr 60

61-25806

Busch, G. and Vogt, O.  
MAGNETIC SUSCEPTIBILITY OF LIQUID SELENIUM  
AND TELLURIUM (Magnetische Suszeptibilität vom  
Flüssigen Selen und Tellur) tr. by D. A. Sinclair.  
1961, 5p. NRCC Technical Trans. 983.  
Order from NRCC \$0.50 NRCC C-3765

Trans. of Helvetica Physica Acta (Switzerland) 1957,  
v. 30, p. 224-227.

DESCRIPTORS: Liquids, \*Selenium, \*Tellurium, \*Mag-  
netic susceptibility.

(Physics--Magnetism, TT, v. 7, no. 6)

I. Busch, G.  
II. Vogt, O.  
III. NRCC TT-983  
IV. NRCC C-3765  
V. National Research Council of  
Canada

Office of Technical Services

Critical Magnetic Fields of Superconducting  
Vanadium, by G. Busch, J. Muller. USCL -

GERMAN, par, Helvetica Phys Acta, No 30,  
1957, pp 230-233. CIA 9039028

AC8IL 1057

Sci - Chem; Phys  
May 59

87 801

A Nuclear Resonance Spectrograph With High Resolution. Part I. Theory of Line Deformation in the High Resolution Nuclear Resonance Spectroscopy, by H. Primas, 18 pp.

GERMAN, per, Helv Phys Acta, Vol XXX, 1957, pp 297-315.

AEC Tr 3761

Sci - Nuc Phys

Sep 59

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New Type of Hertzian Spectrograph for the Observation of Electronic Resonance in the Region of Metre and Decimetre Waves, by J. P. ~~MAN~~ Borel, C. Manus.

GERMAN, per, Helvetica Physica Acta, No 3, 1957, pp 254-257.

CSIRO

Sci - Electron  
Aug 62

211, 240



Mechanism of (n, 2n) Reaction of Be-9 and  
Differential Cross Section for  $\theta = 90^\circ$  at  
Neutron Energy of 3.7 Mev, by P. Huber, R.  
Wagner, 4 pp.

GERMAN, per, Helv Phys Acta, Vol XXX, 1957,  
p 257.

AEC XDC-59-12-34

Sci - Nuc Phys  
Apr 60

112, 932

The Decay of  $^{67}\text{Cu}$ , by W. Beusch.  
GERMAN, per, Helv Phys Acta, Vol 30, 1957,  
pp 268-269.  
\*AEC-ORNL

Sci/Phy  
May 69

A Nuclear Resonance Spectrograph With High  
Resolution. Part II. Description of the  
Apparatus, by H. Friess, En. H. Gaudard.

GERMAN, FOR, REV. 12/15/58, Vol. 1, No. 1, 1959.  
PP 315-330.

AEC Tr 3800

Sci - Phys

Oct 59

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Production of Very Homogeneous Axially Symmetrical  
Symmetric Magnetic Fields, by H. Primas, Ms. H.  
Guthard, 18 pp.

GERMAN, rev, Helv Phys Acta, Vol XXX, 1957,  
pp 331-346.

AEC Tr 3801

Sci. Phys.

Oct 59

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Observation on the CTP-Theorem, by R. Josi.

GERMAN, per, Helvetica Physica Acta,  
Vol XXI, 1957, pp 409-416.

CSIERO

Sci - Phys  
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CEA-tr-A-811      Uncl.

RECHERCHES SUR LES SCINTILLATEURS FORMES DE  
SUBSTANCES MINERALES LUMINESCENTES. CAS  
PARTICULIER DE L'IODURE DE CESIUM. (TRADUCTION  
PARTIELLEMENT RESUMEE). (Research on  
Scintillators formed from Luminescent Mineral  
Substances. Particular Case of CsI (Summary  
of Translation in Parts)). H. Knoepfel,  
E. Loepppe, and P. Stoll. Translated into  
French by R. Carbonnier from Helv. Phys. Acta,  
30: 521-52(1957). 92p.

Instrumentation; Translations      MC-37

C-37    NP    NSA      Dep.(mc)

Modulation Method for Nuclear Resonance Spectroscopy with High Resolution, by H. Primas, 7 pp.

GERMAN, per, Helv Phys Acta, Vol. XXXI, 1958, pp 17-24.

ATS 26K28G

Sci-Nuclear Phys

Jun 59

OTS I, 10

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62-14561

Enz, H. and Rossel, J.  
ON THE LUMINESCENCE OF CsI AND NaI [1962]  
12p. 8 refs.  
Order from SLA \$1.60

62-14561

Trans. of Helvetica Physica Acta (Switzerland) 1958,  
v. 31 [no. 1] p. 25-32.

DESCRIPTORS: \*Cesium compounds, \*Iodides,  
\*Sodium compounds, \*Luminescence, Crystals,  
Lattices.

Improved measurements of the decay law and of the  
temperature dependence of the decay time and lumines-  
cent yield were made for two types of scintillations in  
pure CsI and NaI. The results show that the one type  
is described by a relatively simple model and may be  
explained, as already suggested for NaI, as the re-  
combination of degenerated excitons, self-trapped in  
the crystal lattice. The other type of scintillations,  
(Physics--Solid State, TT, v. 8, no. 1) (over)

I. Enz, H.  
II. Rossel, J.

Office of Technical Services



Müller, K. Alexander.  
PARAMAGNETIC RESONANCE OF  $Fe^{3+}$  IN SINGLE  
CRYSTALS OF  $SrTiO_3$ . [1962] 52p. 58 refs.  
Order from SLA \$5.60 62-16102

Trans. of Helvetica Physica Acta (Switzerland) 1958,  
v. 31 [no. 3] p. 173-204.

DESCRIPTORS: \*Strontium compounds, \*Titanates,  
\*Single crystals, Crystals, Iron, Ions, \*Paramagnetic  
resonance, Resonance.

(Physics--Solid State, TT, v. 8, no. 5)

62-16102

I. Müller, K. A.

Office of Technical Services

CEA-tr-A-974      Uncl.

EXCITATION DES NIVEAUX DE RAYONNEMENT INSTABLES  
DES NOYAUX DU BERYLLIUM 8. (Unstable Excited  
States from Beryllium-8 Nucleus). V. Meyer  
and H. H. Staub. Translated into French from  
Helv. Phys. Acta, 31: 205-20 (1958). 27p.

Particle Physics; Translations MC-34

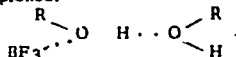
C-34 NP NSA Dep.(mc); \$2.60(fs), \$1.01(mf)  
SLA

N-4

Diehl, P.  
NUCLEAR MAGNETIC RESONANCE STUDIES OF  
THE FORMATION OF BORON TRIFLUORIDE COM-  
PLEXES. [1960] 44p. (14 figs. omitted) 22 refs.  
Order from S.A. ml\$3.30, ph\$7.80 61-10202

Trans. of Helv[et]ica Physica Acta (Switzerland)  
1958, v. 31, no. 7, p. 685-712.

Investigations of the displacement of OH proton resonances as a function of the  $\text{BF}_3$  concentration in  $\text{BF}_3$ -alcohol complexes show the existence of mono- and dimplexes, and confirm the recently proposed structure for the dimplexes:



Between different  $\text{BF}_3$  complexes, an exchange of  $\text{BF}_3$  groups takes place. For the exchange of  $\text{BF}_3$  between  $\text{BF}_3\text{CH}_3\text{OH}$  and  $\text{BF}_3\text{C}_2\text{H}_5\text{OH}$  the activation energy is  $7.3 \pm 1$  kcal/mole. The chemical components of the system  $\text{H}_2\text{O}-\text{BF}_3$  are identified as the  $\text{HBF}_4$ ,  $\text{HBF}_3\text{OH}$ , (Chemistry--Physical, TT, v. 5, no. 5) (over)

61-10202

1. Boron fluorides--Exchange reactions
2. Complex compounds--Spectra
3. Magnetic resonance--Applications
1. Diehl, P.

146,947

Office of Technical Services

TT-65-14523

Field 8L, 20C

Jaccard, C.  
THEORETICAL AND EXPERIMENTAL STUDY ON THE  
ELECTRICAL PROPERTIES OF ICE. 44p, 24refs.  
Order from SLA: \$1.60 as TT-65-14523

Trans. of Helvetica Physica Acta (Switzerland) v32 p2  
p89-128 1959.

MR 690

A Special Thermoluminescence  
Phenomenon, by H. Grogler, H. Stauffer.  
GERMAN, per, Helv Phys Acta, Vol XXXII,  
1959, pp 129-134.  
NASA TT F-10,323

U. S. GOVERNMENT USE ONLY  
Sci-B&M  
Dec 66

316,439

Exchange Interaction Between Superconduction ~~XXXXXXXXXX~~  
Electrons of a Superconductor and Paramagnetic Ions,  
by Walter Baltensperger, 1714

GERMAN, per, Helvetica Physica Acta, Vol XXXII, 1959,  
pp 197-212. 9214718

CAEC-~~tu~~-5978

Sci - Nucl Sci

Aug 63

2

Growth of Ice Water Mixtures in an Experimental  
Hail Tunnel, by Roland List, 3 pp.

GERMAN, per, Helvetica Physica Acta, Vol XXXII,  
No 4, 1959, pp 293-296.

Amer Meteorol Soc T-G-165  
AF Cambridge Res Center

Sci - ~~ENGINEER~~ Geophys  
Phys  
Sep 61

167,833

The Absolute Measurement of the  
Strengths by Means of a New Form  
Evidence Method, by K. P. Meyer, P. b-  
P. Huber, 26 pp.

GERMAN, per, Helv Phys Acta, Vol XXXII, 1959,  
pp 423-424.

AEC AECL-978

124,020

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Aug 60

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Acta,  
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XXIX A-1089

Sci  
18 Sep 62



The Fermi Surface of Aluminum, by B. Luthi.  
UNCLASSIFIED

GERMAN, per: <sup>etia</sup> Helv Physica Acta, Vol XXXII, No 6/7,  
1959, pp 470-473. 9576897

Navy 2601/NRL 810

Sci - Physics  
Aug 60

123,370

Hulliger, F. von.  
ON THE CONNECTION BETWEEN MAGNETISM AND  
ELECTRICAL CONDUCTIVITY OF COMPOUNDS  
WITH TRANSITION ELEMENTS. [1963] 54p. (figs.  
tables [refs.] omitted).  
Order from SLA \$5.60

63-14855

Trans. of Helvetica Physica Acta (Switzerland) 1959,  
v. 32, p. 615-654.

DESCRIPTORS: \*Chemical bonds, \*Magnetism,  
\*Electrical conductance, Chemical compounds, \*Tran-  
sition elements, Valence, Electrons, \*Semiconductors,  
Ferromagnetism.

In judging the compounds with transition elements the  
problem consists of being able to conclude whether the  
non-binding d- or f-electrons are independent from the  
binding-electrons. A partial occupation of energetically  
(Physics--Solid State, TT, v. 10, no. 4) (over)

63-14855

I. Hulliger, F. von

Office of Technical Services

Superconductivity in Alloys of Molybdenum With  
Titanium and Vanadium, by E. Bucher, G. Busch,  
J. Muller, 3 pp.

GERMAN, per, Helvetica Physica Acta, Vol XLII, No  
1959, pp 318-320. 9077276

ACSIIL Tr No 1282

Sci - Min/Metals, Phys

Aug 61

162,746

Tritium and Helium-Contents in Meteorites, by  
J. Geiss, B. Hirt, et al, 3 pp.

GERMAN, per, Helvetica Physica Acta, Vol XXXIII,  
1960, pp 590-593, 9210734

<sup>2</sup>  
\*AEC-TR-5851

Sci - Phys

Jun 63

A Photomultiplier With a Sb - Na - K Cathode, by  
W. Baumgartner, J. Linder, 5 pp.

GERMAN, per, Helv Phys Acta, Vol XXXIII, 1960,  
pp 608-. 9087634

ABC UCRL Tr-809(L)

Sci - Phys  
Jun 62  
List 69

197,838

Busch, G. and Hulliger, F.  
MINERALS AS MODELS FOR NEW SEMICONDUCTOR  
COMPOUNDS. [1961] [13] p. 7 refs.  
Order from SLA \$1.60

61-16513

Trans. of Helv[etia] Phys[ica] Acta (Switzerland) 1960,  
v. 33 [no. 6/7] p. 657-666.

DESCRIPTORS: Selenides, Tellurides, \*Minerals,  
\*Semiconductors, Energy, Lattices.

New semiconductor compounds can be obtained by combination of binary semiconductors. However, the possible mixing ratios must usually first be determined experimentally. An indication of possible stoichiometric relations in ternary and quaternary selenide and telluride semiconductors is obtained from the natural nonmetallic sulfide minerals. Partial replacement of the elements in the minerals by chemically related ones leads to a large number of new semiconductors with (Physics--Solid State, TT, v. 6, no. 6) (over)

61-16513

I. Busch, G.  
II. Hulliger, F.

176539

Office of Technical Services

63-18148

I. Houtermans, F. G.

Houtermans, F. G.  
THE MASER EFFECT IN THE OPTICAL SPECTRAL  
REGION AND THE POSSIBILITY OF ABSOLUTE NEG-  
ATIVE ABSORPTION FOR SEVERAL CASES OF MO-  
LECULAR SPECTRA (LIGHT AVALANCHE). [1963] 9p

27refs

Order from SLA \$1.10

63-18148

Trans. of Helvetica Physica Acta (Switzerland) 1960,  
v. 33, p. 933-940.

DESCRIPTORS: \*Masers, \*Microwave amplifiers,  
\*Optics, \*Molecular spectroscopy, Excitation, Atoms,  
Photons, Gases, Plasma physics, Lasers.

(Physics--Optics, TT, v. 10, no. 10)

Office of Technical Services

61-18691

Ehrat, R. and Rivier, D.  
ON THE THEORY OF ENERGY BANDS FOR TRANSITION METALS OF THE FIRST PERIOD. [1961] 7p.  
23 refs.

Order from SLA \$1.10

61-18691

Trans. of Helvetica Physica Acta (Switzerland) 1960,  
v. 33, no. 9, p. 954-959.

DESCRIPTORS: \*Metals, \*Transition elements, Energy,  
Specific heat, Electrons, Theory.

Recent measurements of the specific electronic heat  $\gamma$  and the common Hall constant  $R_0$  as a function of  $Z$  seems to challenge the general band model for the transition metals and, particularly, the approximation of the rigid band. Perhaps better approximations of the band theory will re-establish agreement with experiment. It seems desirable to extend the measurements (Physics, TT, v. 6, no. 10) (over)

I. Ehrat, R.  
II. Rivier, D.

Office of Technical Services



A Source of Polarized Deuterons and Detection of  
the Polarization by the (d,T) Reaction, by H. Rudin,  
H. R. Striebel, E. Baumgartner, 28 pp.

GERMAN, per, Helvetica Physica Acta, Vol XXXIV,  
No 1, 1961, pp 58-84. 9093432

AERE, Harwell Tr-830

Sci - Phys  
May 62

193, 711

Pyromellitic Acid and Cumidic Acid  
Derivatives. Part II, by H. Hopff.  
GERMAN, per, Helvetica Chimica Acta,  
Vol 43, 1960, pp 1645-1653  
NTC 72-11605-07C

June 72

Quadrupole Resonances, Phase Transitions  
and Ferro Electricity of the Alkali Iodates,  
by P. Herlach.

GERMANY, FOR, Helv. Physica Acta, Vol XXXIV,  
No 1, 1961, pp 405-430.

CSIRO/No 5745

Sol-Phys  
Jun 63

234,358

A Generalized Perturbation Theory for  
Quantum-Mechanical Many-Body Problems,  
by H. Primas.

SWISS, per, Helv. Phys. Acta, Vol 34,  
1961, pp 331-351.

OT 8225

RRE 140

Sci-Phys  
Aug 66

308,497

62-16597

Beck, A. and Mooser, E.  
APPARATUS FOR PULLING SINGLE CRYSTALS OF  
COMPOUNDS WITH VOLATILE COMPONENTS. [1962]  
5p. 5 refs.  
Order from SLA \$1.10

62-16597

Trans. of Helv[et]ica Phys[ica] Acta (Switzerland) 1961,  
v. 34, 15 Aug, p. 370-373.

DESCRIPTORS: \*Single crystals, Crystals, \*Crystal  
holders, Metallic crystals.

The apparatus uses magnetic coupling combined with a  
new drive system for the crystal holder. Due to the  
special shape of the pole pieces and the two hollow  
cylinders of Hiperco (Curie point 970°C) sealed in the  
seed holder, the latter is always attracted to the same  
pole piece. If the magnet rotates around the axis of the  
ampoule, the seed holder on its two roller tracks rolls  
(Physics--Solid State, TT, v. 10, no. 6) (over)

I. Beck, A.  
II. Mooser, E.

Office of Technical Services

Electrical Field Gradients in Ion Crystals, by  
E. Brun, S. Hafner, et al.

GERMAN, per, Helv. Phys. Acta, Vol ~~XXXX~~ XXXIV,  
1961, pp 391-392.

AE/SCL-T-440

Sci - Phys

Apr 63

226,778

Exchange Interaction Between Superconduction ~~XXXXXXXXXX~~  
Electrons of a Superconductor and Paramagnetic Ions,  
by Walter Baltensperger, 17M

GERMAN, per, Helvetica Physica Acta, Vol XXXII, 1959,  
pp 197-212. 9214718

6AEC-TL-5978

Sci - Nucl Sci

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Growth of Ice Water Mixtures in an Experimental  
Hail Tunnel, by Roland List, 3 pp.

GERMAN, per, Helvetica Physica Acta, Vol XXXII,  
No 4, 1959, pp 293-296.

Amer Meteorol Soc T-G-165  
AF Cambridge Res Center

Sci - ~~ENGINEER~~ Geophys  
Phys  
Sep 61

167,833



The Absolute Measurement of Radioactive Source Strengths by Means of a New Form of the Coincidence Method, by K. P. Meyer, P. Schmid, P. Huber, 26 pp.

GERMAN, per, Helv Phys Acta, Vol XXXII, 1959, pp 423-424.

AEC AECL-978

Sci - Phys  
Aug 60

124,020

Mesure Absolue des Intensites des Sources Radioactives a l'Aide d'une forme Nouvelle de la Methode de Coincidence, by K. P. Meyer, P. Schmid, et al, 40 pp.

GERMAN to FRENCH, per, *Physica* ~~Helvetica Physica~~ Acta, Vol XXXII, 1959, pp 423-444. ~~REF~~ 9093529

REVERSE TRANS  
CEA Tr ~~XXXX~~ A-1089

Sci  
18 Sep 62

The Fermi Surface of Aluminum, by B. Luthi.  
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GERMAN, per: <sup>et in a)</sup> Helv Physica Acta, Vol XXXII, No 6/7,  
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Navy 2601/NRL 810

Sci - Physics  
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Office of Technical Services

Superconductivity in Alloys of Molybdenum With  
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ACSIL Tr No 1282

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<sup>2</sup>  
\*AEC-TR-5851

Sci - Phys

Jun 63

A Photomultiplier With a Sb - Na - K Cathode, by  
W. Baumgartner, J. Linder, 5 pp.

GERMAN, per, Helv Phys Acta, Vol. XXXIII, 1960,  
pp 608-. 4087634

ABC UOHL Tr-809(L)

Sci - Phys  
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(Physics--Solid State, TT, v. 6, no. 6) (over)

61-16513

I. Busch, G.  
II. Hulliger, F.

176539

Office of Technical Services



Houtermans, F. G.  
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REGION AND THE POSSIBILITY OF ABSOLUTE NEG-  
ATIVE ABSORPTION FOR SEVERAL CASES OF MO-  
LECULAR SPECTRA (LIGHT AVALANCHES). [1963] 9p  
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63-18148

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DESCRIPTORS: \*Masers, \*Microwave amplifiers,  
\*Optics, \*Molecular spectroscopy, Excitation, Atoms,  
Photons, Gases, Plasma physics, Lasers.

(Physics--Optics, TT, v. 10, no. 10)

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I. Houtermans, F. G.

Office of Technical Services

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Order from SLA \$1. 10

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DESCRIPTORS: \*Metals, \*Transition elements, Energy,  
Specific heat, Electrons, Theory.

Recent measurements of the specific electronic heat  $\gamma$  and the common Hall constant  $R_0$  as a function of  $Z$  seems to challenge the general band model for the transition metals and, particularly, the approximation of the rigid band. Perhaps better approximations of the band theory will re-establish agreement with experiment. It seems desirable to extend the measurements (Physics, TIT, v. 6, no. 10)

(over)

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DESCRIPTORS: \*Single crystals, Crystals, \*Crystal  
holders, Metallic crystals.

The apparatus uses magnetic coupling combined with a  
new drive system for the crystal holder. Due to the  
special shape of the pole pieces and the two hollow  
cylinders of Hiperco (Curie point 970°C) sealed in the  
seed holder, the latter is always attracted to the same  
pole piece. If the magnet rotates around the axis of the  
ampoule, the seed holder on its two roller tracks rolls  
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